QFR No - 7000838558

Defect Details

NC No.	7000838558
NC Date	25/05/2022
NC Submission Date	
Part No.	F1GN01102B
Part Name	MAIN SPRING K86A
Supplier Name & Code	101225-HELICAL SPRINGS
ETL Plant	1136-ETL Suspension Sanand
Defect Details	PARALITY NOT OK.-Perpendicularity Out of Spec

1. Problem Description

Defect Description	Perpendicular NG i.e. observed 1.44, 1.37, 0.85 mm against the spec of 0.5 mm Max.
Detection Stage	Receipt
Problem Severity	Function
NG Quantity	3400
Is Defect Repeatative?	Yes
Defect Sketch / Photo	3jd0wsglcjllsqocql1hxmsz.jpg

Supplier Communication Details

Quality Head Email ID	ravindra@helicalsprings.in
Plant Head/CEO Email ID	shaikhmoin@helicalsprings.in
MD Email ID	ataneja@helicalsprings.in

2. Stock Details & action taken for NG parts

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
Total Qty	15400	0	0	0	8450	23850
Check Qty	15400	0	0	0	8450	23850
NG Qty	15400	0	0	0	0	15400

Action taken on NG part

Scrap	0
Rework	0
Under Deviation	15400

Containment Action
All material used under deviation. we maintain e2 within spec 1.00 mm Max.

3. Process Flow

Process Flow Description
RM>Coiling>SR1>Grinding>Shotpeening>Setting>Correction>SR2>PDI>Packing>Dispatch.

4. Process Details

Process / Operation	Grinding
Outsource	No
Machine / Cell	Grinding
Machine / Cell No.	NA

5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Machine	Machine check Sheet not followed	CLIT verified found ok	O
Method	top and bottom grinding plate hole alignment not ok	Alignment found disturb	X
Man	unskilled Operator	Skill matrix checked found ok	O
Material	As per Drawing Not ok	RMTC verified found ok	O

6. Inspection Method Analysis (Current)

Inspection Method	Instrument
Other Inspection Method	
Check Point at Final Inspection	Yes
Checking Freq.	Sampling
Sampling	No
Sample Size	29/3201

7. Root Cause Analysis (Occurance)

Why 1	Perpendicularity Observed 0.7MM Against 0.5MM Max.
Why 2	Due to taper grinding.
Why 3	Top grinding plate position disturb w .r. t. bottom grinding plate
Why 4	Single nut locking system available
Why 5	
Root Cause (Occurance)	Single nut locking system available

Root Cause Analysis (Outflow)

Why 1	Perpendicularity Observed 0.7MM Against 0.5MM Max
Why 2	No inspection for e2
Why 3	No check point in line inspection for e2
Why 4	
Why 5	
Root Cause (Outflow)	No check point in line inspection for e2

8. Countermeasure (Occurrence , Outflow & System side Actions)

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Occurance	Additional locking pins provided into both plates to fix the position.	Mr. Niesh Kapure	22/02/2022	21/02/2022	Completed

9. Inspection Method After Customer Complaint

Change In Inspection System	Yes
Change Details	Introduced the perpendicularity in line inspection
Inspection Method	Instrument
Other Inspection Method	
Check Point at Final Inspection	Yes
Checking Freq.	Sampling
Sampling	No
Sample Size	23/3200

10. Evidance of Countermeasure

Occurance (Before)	Single nut locking system available 150_Occurance_Before.jpg
Occurance (After)	Additional locking pins provided into both plates to fix the position 150_Occurance_After.jpg
Outflow (Before)	No check point in line inspection for e2 150_Outflow_Before.pdf
Outflow (After)	Introduced the perpendicularity in line inspection 150_Outflow_After.pdf

11. Horizontal Deployment

Horizontal Deployment Required	Yes
Applicable Machine / Model / Plant	All main Spring

12. Document Review

Documents	InspCheckSheet
Specify Other Document	Patrolling Insp

13. Effectiveness Of Action

Reviewed Quantity	0
Reason for submission	ok